

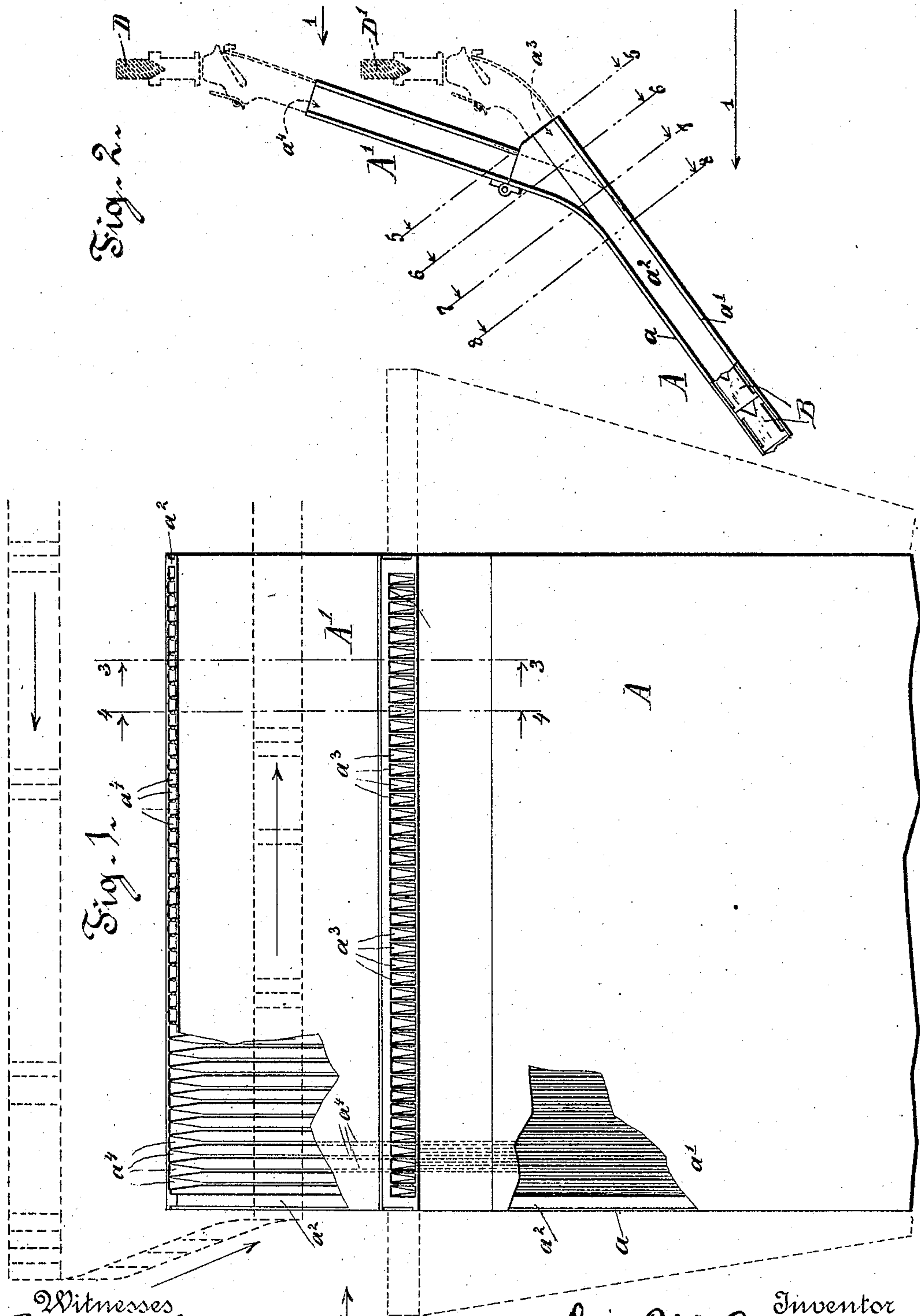
No. 805,992.

PATENTED NOV. 28, 1905.

D. PETRI-PALMEDO.
LINOTYPE MACHINE.

APPLICATION FILED AUG. 30, 1905.

4 SHEETS—SHEET 1.



Witnesses
M. K. Kupper
E. J. Moray

Inventor
David Petri-Palmedo
By his Attorney P. F. Dodge

D. PETRI-PALMEDO.
LINOTYPE MACHINE.

APPLICATION FILED AUG. 30, 1905.

4 SHEETS—SHEET 2.

Fig. 3.

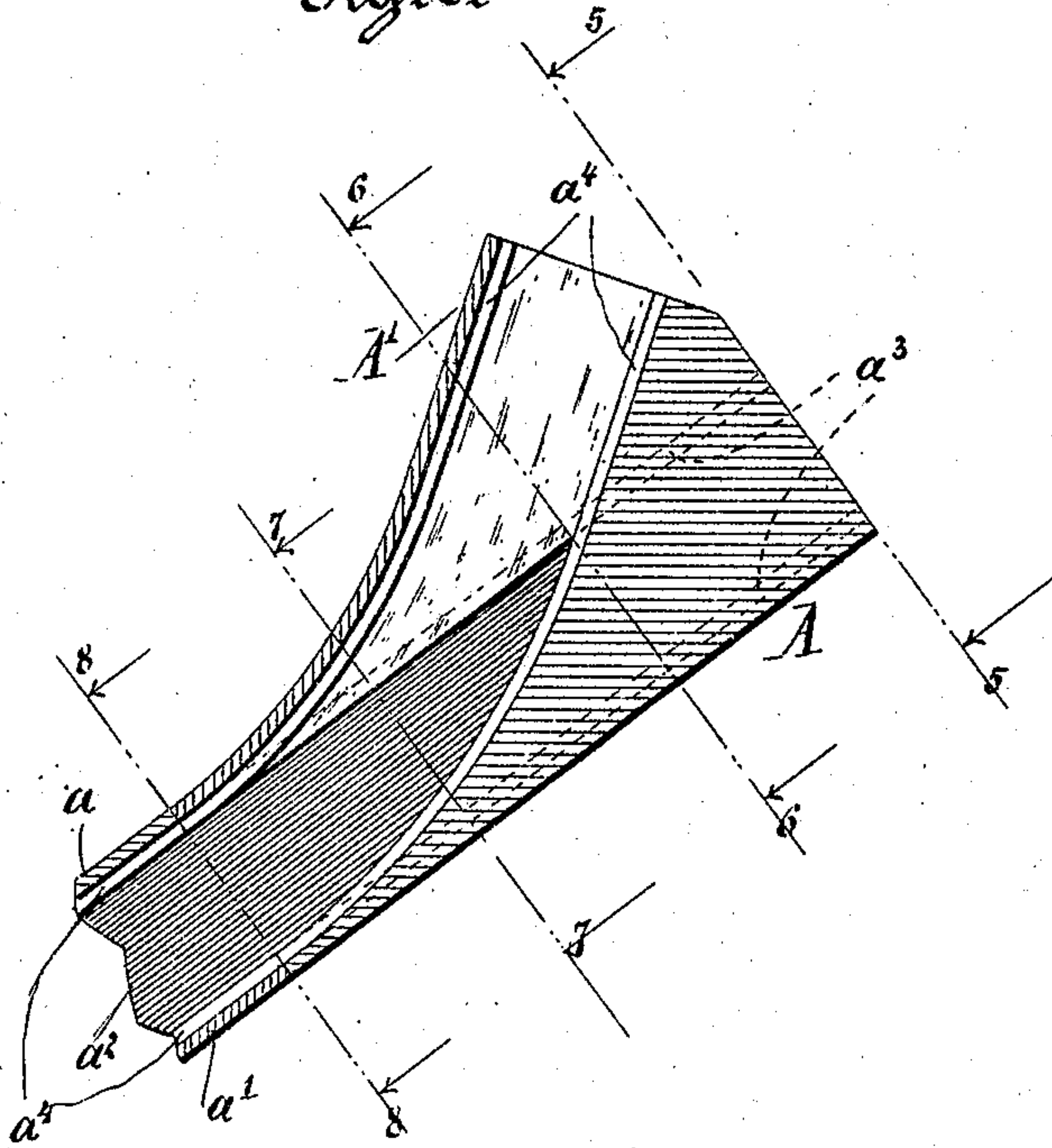
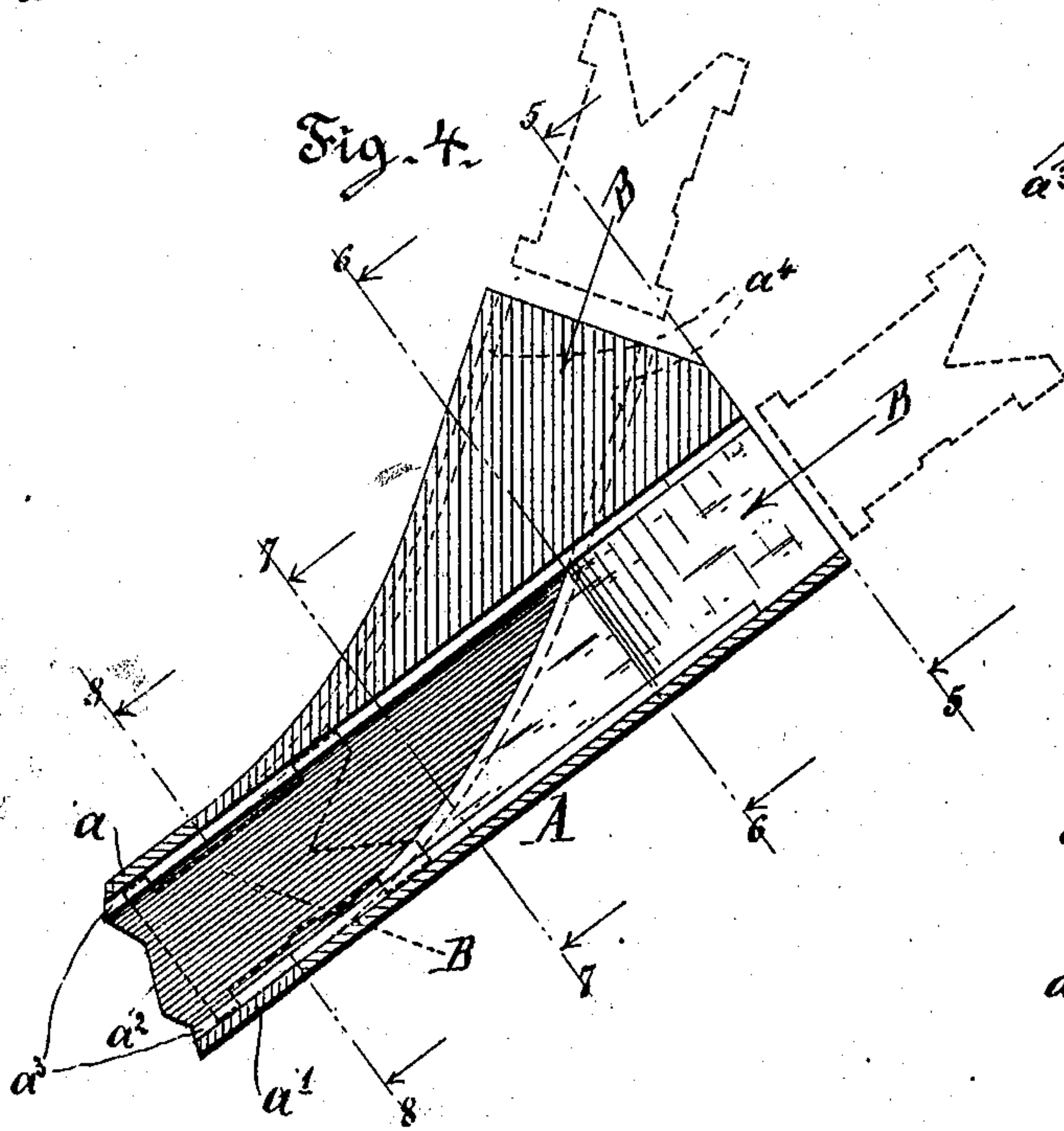


Fig. 4.



Witnesses
Moxliff
Er Motie

Fig. 5.

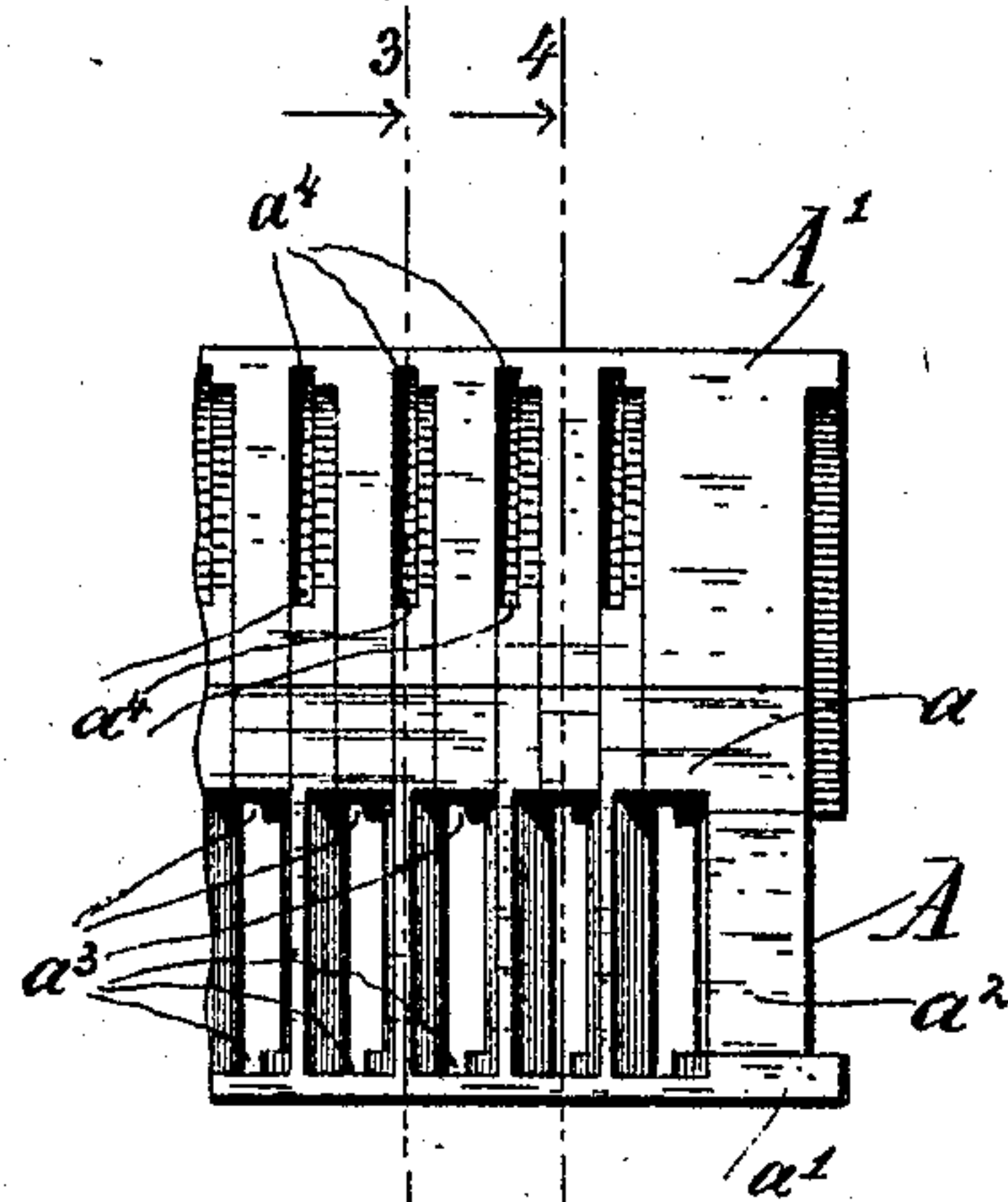


Fig. 6.

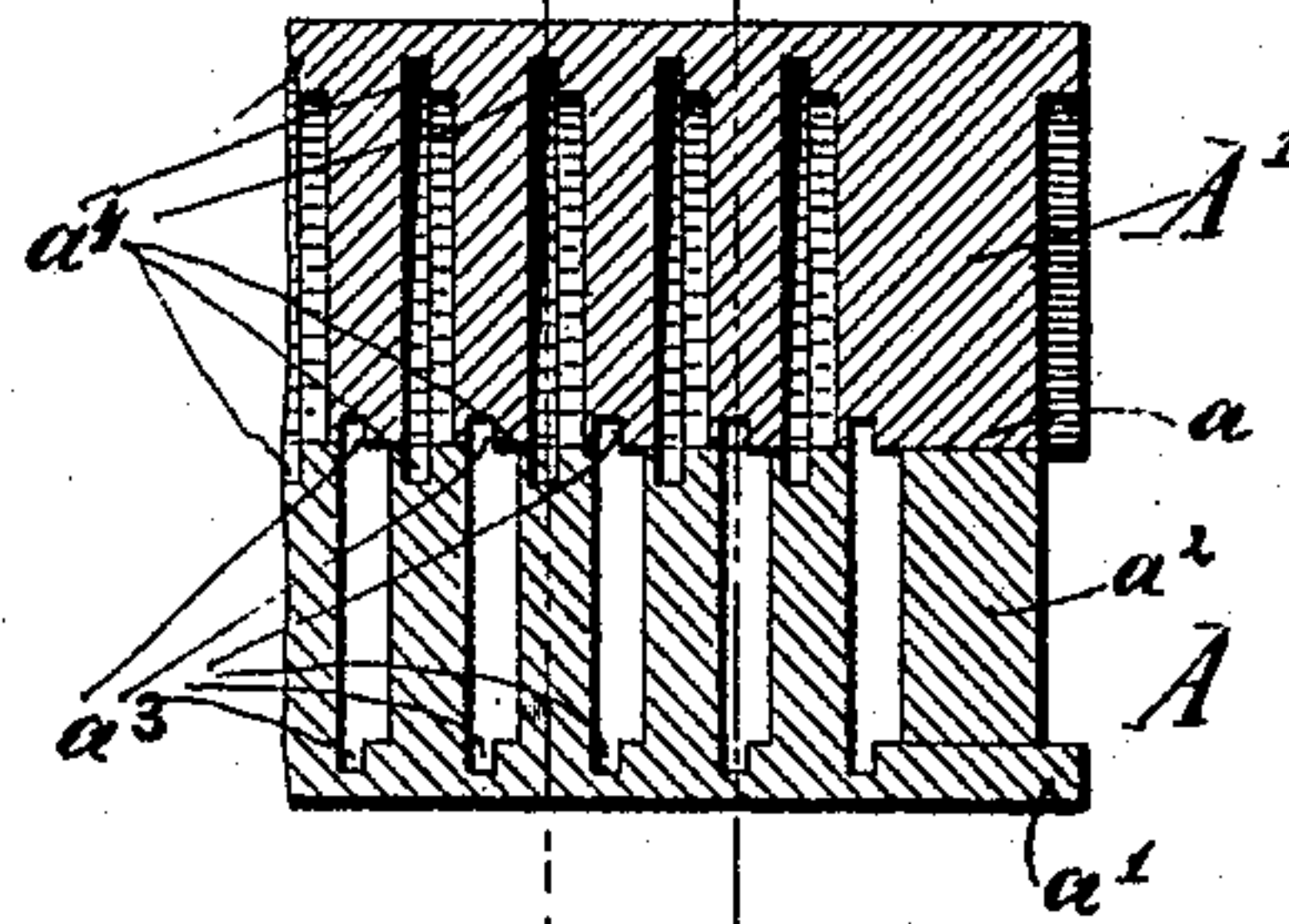


Fig. 7.

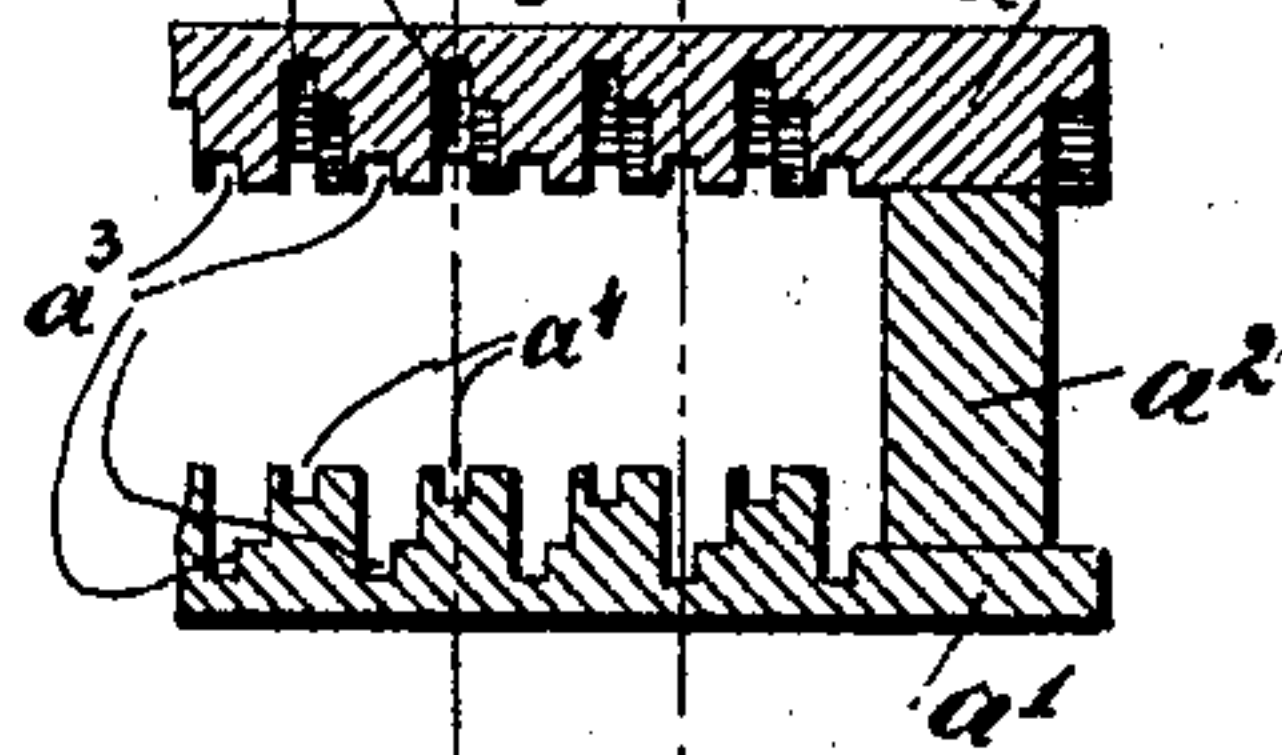
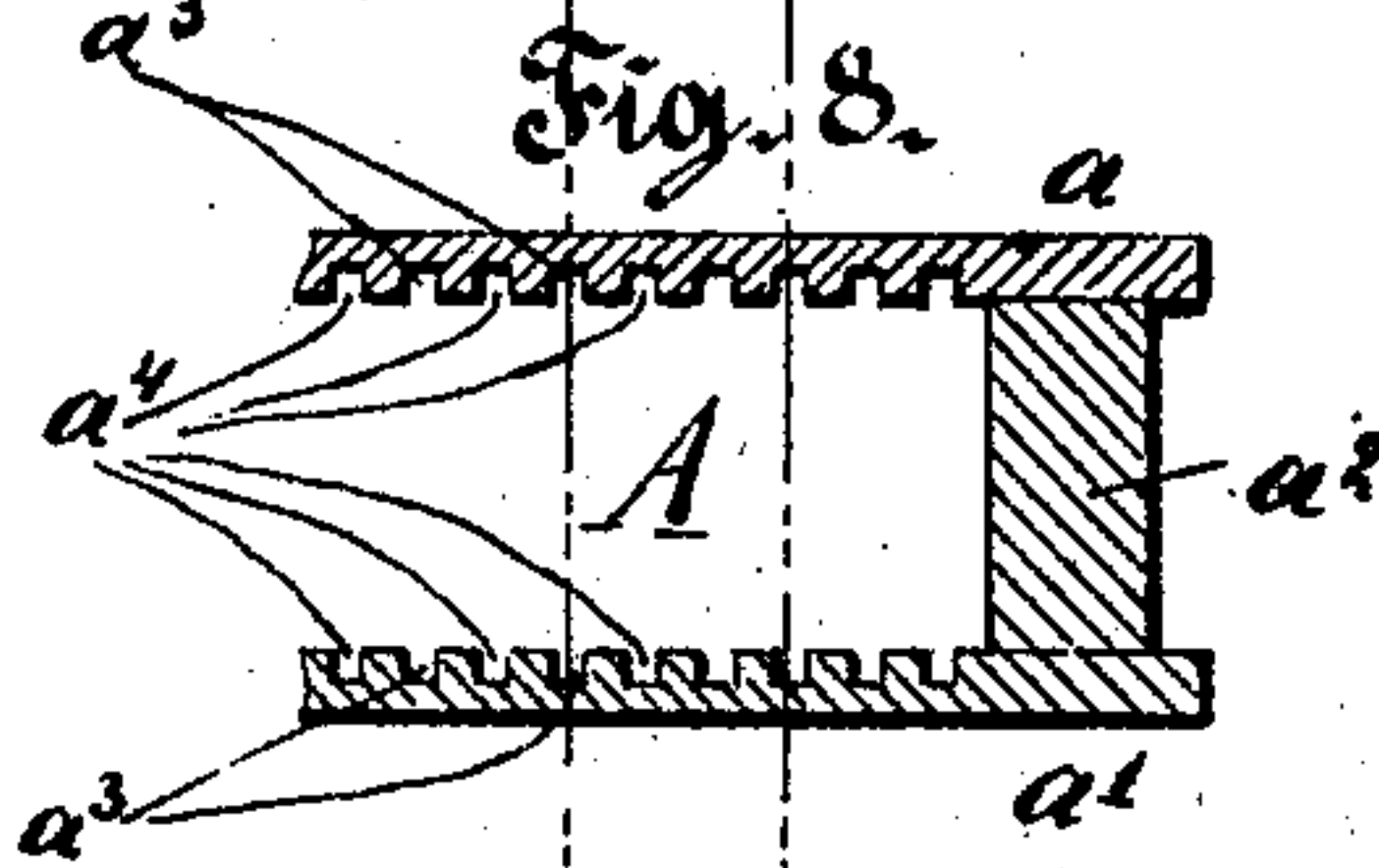


Fig. 8.



Inventor
David Petri-Palmedo
By his Attorney P. F. Dodge

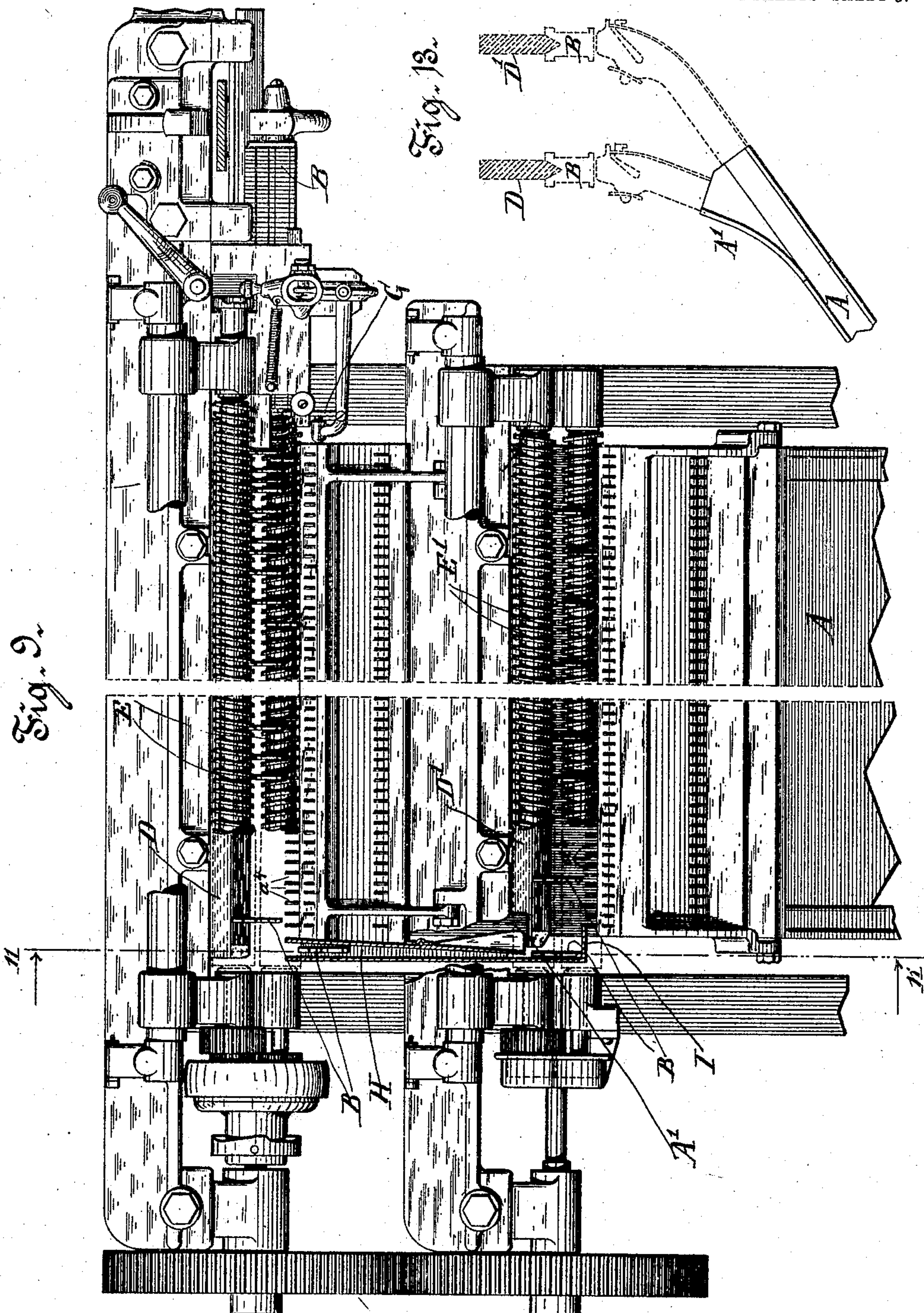
No. 805,992.

PATENTED NOV. 28, 1905.

D. PETRI-PALMEDO.
LINOTYPE MACHINE.

APPLICATION FILED AUG. 30, 1905.

4 SHEETS—SHEET 3.



Witnesses
M. K. Coffey
E. P. Morry

David Petri-Palmedo Inventor
By his Attorney P. F. Dodge

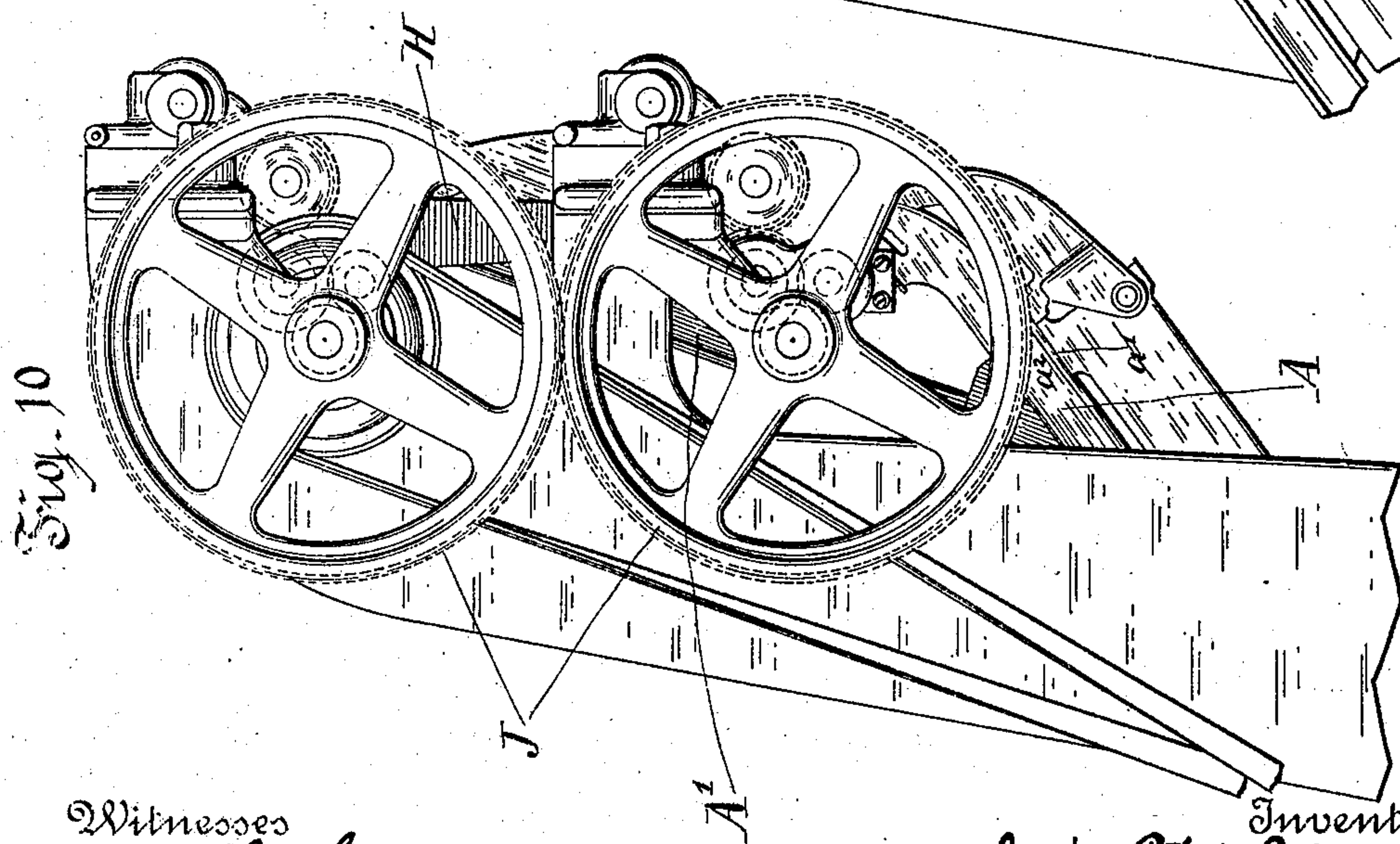
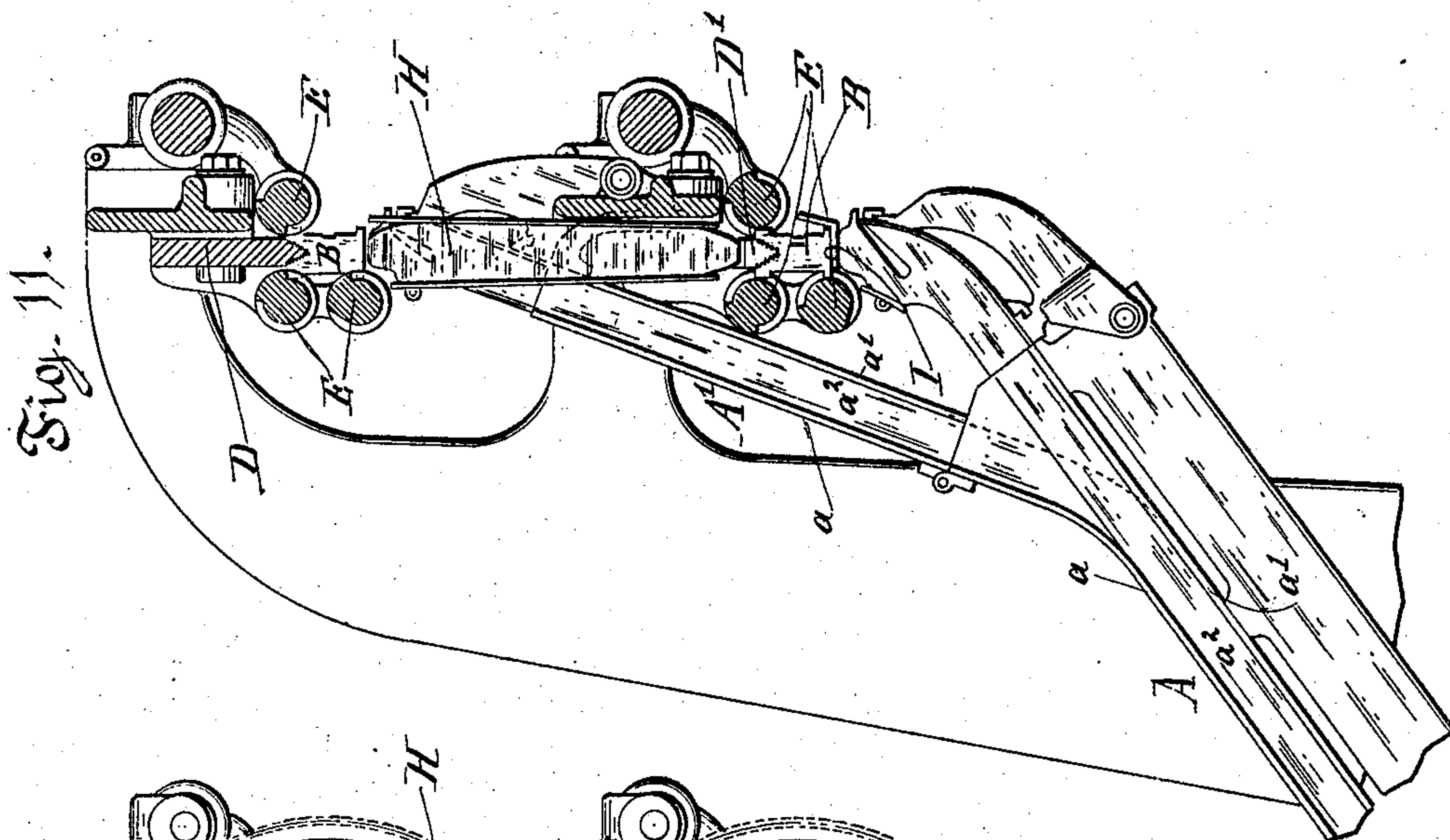
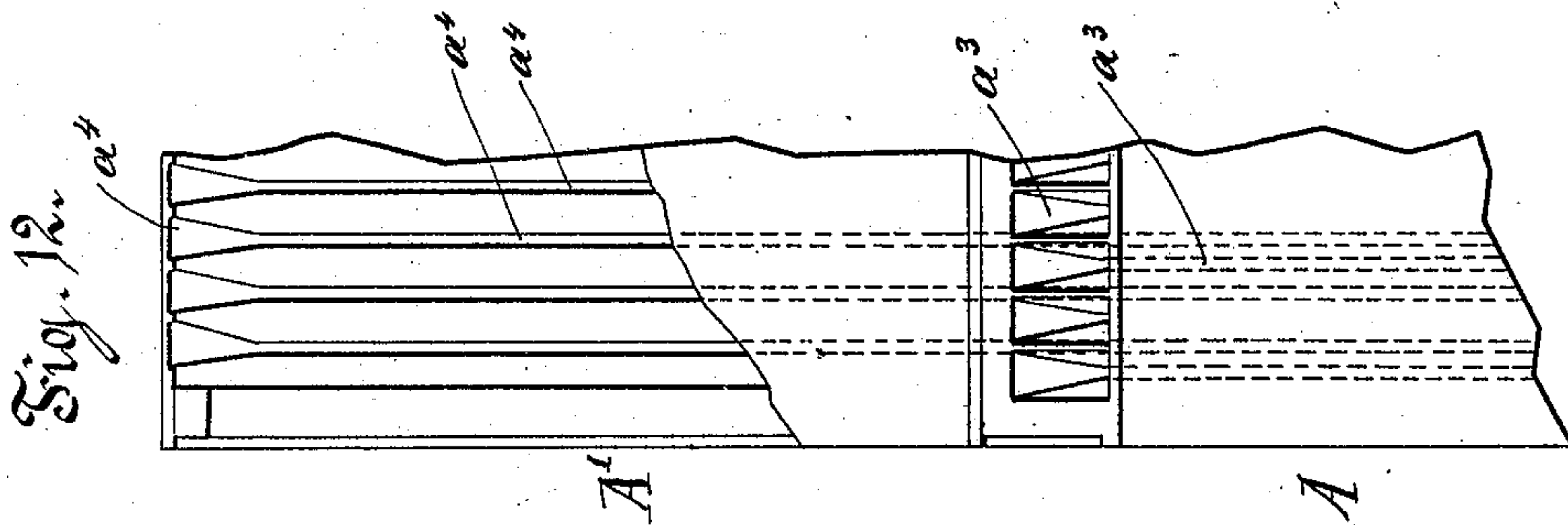
No. 805,992.

PATENTED NOV. 28, 1905.

D. PETRI-PALMEDO.
LINOTYPE MACHINE.

APPLICATION FILED AUG. 30, 1905.

4 SHEETS—SHEET 4.



Witnesses
M. S. Koffler
E. P. Morry

By

Inventor
David Petri-Palmedo
Attorney *P. F. Dodge*

UNITED STATES PATENT OFFICE.

DAVID PETRI-PALMEDO, OF HOBOKEN, NEW JERSEY, ASSIGNOR TO
MERGENTHALER LINOTYPE COMPANY, A CORPORATION OF NEW
YORK.

LINOTYPE-MACHINE.

No. 805,992.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed August 30, 1905. Serial No. 276,370.

To all whom it may concern:

Be it known that I, DAVID PETRI-PALMEDO, of Hoboken, county of Hudson, and State of New Jersey, have invented a new and useful
5 Improvement in Linotype-Machines, of which the following is a specification.

This invention relates to channeled magazines for circulating linotype-matrices of the character represented in United States Letters Patent No. 436,532. These magazines
10 consist of two parallel plates secured to intermediate separating bars or blocks and provided in their inner faces with longitudinal grooves or channels to receive and guide the
15 edges of the matrices. The matrices are delivered one at a time from a distributing mechanism into the upper ends of these channels, from which they are delivered at the lower ends. It is necessary that the channels shall
20 be arranged at their delivery ends as closely together as possible in order to equalize the time required for the passage of the different matrices from the respective channels to the assembling devices. On the other hand, it is
25 desirable that the upper or receiving ends of the channels shall be separated as widely as possible in order to facilitate the entrance of the matrices from the distributor and to prevent them from overcarrying or lodging in
30 the mouths of the channels. In order to accomplish these two results, it has heretofore been the practice to construct the magazines of trapezoidal form, the channels starting at the upper and wider end of the machine and
35 converging thence toward the lower end. This construction is expensive, necessitates a lengthening of the distributing mechanism, and is otherwise objectionable.

The principal aim of the present invention
40 is to overcome these difficulties and permit the use of parallel channels in a magazine of rectangular form while at the same time securing the two objects above named. To this end I construct a magazine with parallel chan-
45 nels and with two series of inlet-throats or entrances communicating with alternate channels, which in turn receive matrices from two distributors—one distributor delivering matrices intended for every alternate or second
50 channel in the magazine, while the other delivers the ones intended for the intermediate channels. This arrangement permits me to give the flared mouth of each inlet-throat or

entrance twice the width which would otherwise be allowed.

Referring to the drawings, Figure 1 represents a top plan view of the magazine having my improvement incorporated therein. Fig. 2 is a side view of the same with the position of distributors indicated in dotted lines. Fig. 3 is a vertical section through the upper or receiving end of the magazine on the lines 3-3, Figs. 1, 5, 6, 7, and 8. Fig. 4 is a vertical section of the upper end of the magazine on the lines 4-4, Figs. 1, 5, 6, 7, and 8. Figs. 5, 6, 7, and 8 are sections on the correspondingly-numbered lines of Figs. 2, 3, and 4. Fig. 9 is a rear elevation of the upper portion of the machine having my improvement embodied therein. Fig. 10 is a side view of the part shown in Fig. 9 looking from the left. Fig. 11 is a vertical cross-section on the line 11-11, Fig. 9. Fig. 12 is a plan view of the magazine, partly in section, on an enlarged scale. Fig. 13 is a side view indicating the manner
75 in which two distributors may be used on the same level instead of different levels, as in the preceding figures.

In the drawings, A represents the magazine proper, consisting of parallel top and bottom
80 plates a and a' , secured to intermediate separating bars a^2 and provided in their inner or opposing faces with longitudinal parallel grooves a^3 and a^4 to receive and guide the upper edges of the matrices B, which pass between them,
85 as indicated in dotted lines in Fig. 4. The alternate grooves or channels a^3 are extended in straight lines to the upper end of the magazine proper, where their upper ends are flared or widened, as usual, to permit the free en-
90 trance of the matrices from a distributor of any suitable character. The intermediate channels a^4 , lying between the channels a^3 , are continued upward beyond the end of the magazine proper into the supplemental magazine
95 or throat A', and at the upper end of this throat they are flared or widened laterally in the same manner that the mouths of the other channels are widened to facilitate the entrance
100 of the matrices.

By reason of the fact that the two series of channels a^3 and a^4 are terminated in different horizontal lines or, in other words, one series of alternate channels extended beyond the intermediate channels space is afforded
105 for giving the mouth or entrance of each chan-

nel a much greater width than would otherwise be possible. For example, although the distance between the centers of the channels at the bottom of the magazine may be one-fourth of an inch, it is possible under my arrangement to give the receiving end of each channel a width of one-half inch. The wide opening thus afforded at the receiving ends of the magazines is of great advantage, since it permits the falling matrices to enter the channels with certainty and without hesitation. There is no danger of the matrix being over-carried, nor is there any danger of a matrix lodging in the mouth of a channel and failing to descend, as will sometimes occur in machines of the ordinary construction. The essence of my invention with regard to the channels consists in extending the receiving ends of certain channels beyond the receiving ends of other channels in order to permit the widening of their mouths; also to permit the different channels in the same magazine to receive the matrices from different distributors—a feature which I believe to be entirely new and which is not dependent upon the arrangement of the channels in parallel lines.

In Figs. 9 to 11 I have shown one magazine with its two series of entrances combined with two distributing mechanisms of the Mergenthaler type for delivering matrices thereto. The upper distributor consists (see Figs. 9 and 11) of a horizontal rigid bar D and parallel screws E. The bar is of V form. It is provided with longitudinal permuted teeth to engage corresponding teeth in the matrices and hold them in suspension as they are moved along the bar until they arrive over the appropriate channels of the magazine, the construction and arrangement of these parts being the same as in the ordinary Mergenthaler linotype-machines. The matrices of a composed line are lifted from the casting position, as usual, by the so-called "second elevator" and thence to the distributor-bar and screws by the usual lifting-finger G. The matrices intended for channels α^4 bear combinations of teeth which cause them to be delivered from the upper distributor-bar D, from which they fall into the magazine extension or entrance A', above referred to, through which they pass into the channels α^4 . The matrices intended for the intermediate channels α^3 have such combinations of teeth that they will travel the entire length of the bar D, from which they are delivered at the left end, as shown in Fig. 9, to the vertical conductor H to the lower distributor. This distributor is essentially of the same construction as the upper one and consists of a bar D' and the adjacent feed-screws E'. The matrices, descending through the conductor H, enter between the threads of the lower feed-screws E' and are arrested on their descent and sustained by the horizontal fixed shelf or plate I. While thus sustained they are carried forward by the screws into engagement with the

bar D', on which they travel until they arrive over the mouths of the appropriate channels α^3 , into which they are delivered and through which they pass into the magazine. It will of course be understood that the distributing-teeth of the matrices passing to the lower distributor are of such combinations that the distributor will deliver them to their proper channels. The screws of the upper and lower distributors are connected by gears J or other suitable connections, compelling them to operate in unison, so that the falling matrices from the upper distributor-bar will arrive at the screws of the lower distributor when the threads stand in such a position as to admit their free entrance.

It will be manifest to the skilled mechanic that distributing mechanism of any suitable character may be employed to deliver the matrices to the alternate channels of the magazine and that the channels and their receiving ends may be modified in form and arrangement at will, provided only that certain of the channels are extended beyond the others.

Instead of arranging the distributors one above the other, as shown in Figs. 9, 10, and 11, they may be arranged in parallel lines at a common level, as shown in Fig. 13. In such case the entrances to the second series of channels would be extended upward beneath the respective distributors, as indicated in the dotted lines, or any suitable construction foreign to the present invention could be employed to deliver the matrices to the proper distributors.

Having described my invention, what I claim is—

1. A magazine for a typographic machine having alternate channels extended at the receiving end beyond intermediate channels.
2. A magazine for a linotype-machine having channels and inlets to the alternate channels arranged in two different lines.
3. A channeled magazine having the inlets to the alternate channels arranged out of line with each other.
4. A channeled magazine, in combination with two distributors communicating respectively with alternate channels.
5. A magazine having channels extended in a straight line therethrough and intermediate channels deflected at the receiving ends out of line with the receiving ends of the other channels.
6. A magazine having a series of channels each widened or flared at the receiving end, certain of the channels being extended beyond those lying between them, to permit an increased widening of the end or mouth as described.
7. In combination a channeled magazine, a distributor, arranged to deliver matrices to alternate channels of the magazine, and a second distributor to deliver matrices to the remaining channels of said magazine.
8. In combination a magazine, a distrib-

uter arranged to deliver matrices to a portion
only of the magazine-channels, a second dis-
tributer arranged to deliver to the remaining
channels of said magazine, and a series of mat-
5 rices comprising matrices adapted for distri-
bution by the first distributor and also mat-
rices adapted for delivery by the first distrib-
uter to the second and for distribution by the
latter; whereby a composed line may be de-

livered through the two distributors to the 10
different channels of one magazine.

In testimony whereof I hereunto set my
hand, this 28th day of August, 1905, in the
presence of two attesting witnesses.

DAVID PETRI-PALMEDO.

Witnesses:

MARGARET DOYLE,
MINNIE F. DALY.